

Title (en)

SUPPORTED METALLOCENE CATALYST AND OLEFIN POLYMERIZATION USING THE SAME

Title (de)

METALLOCEN TRÄGERKATALYSATOR UND OLEFINPOLYMERISATION UNTER VERWENDUNG DESSELBEN

Title (fr)

CATALYSEUR METALLOCENE SUR SUPPORT ET POLYMERISATION D'OLEFINE UTILISANT CELUI-CI

Publication

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Application

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Abstract (en)

[origin: WO0078827A1] The present invention relates to a metallocene compound having a functional group that facilitates the preparation of the supported metallocene catalyst for olefin polymerization and the olefin polymerization process using the same. The present invention utilizes a reaction of the functional group of a ligand such as acetal, ketal, tertiary alkoxyalkyl, benzyloxyalkyl, substituted benzyloxyalkyl, monothioacetal, or monothioacetal with highly reactive silica dehydroxylated above 600 DEG C. The metallocene compounds in this invention are strongly supported on the inorganic support due to the strong chemical bond of the ligand of the metallocene compound with the silica surface, which leads to minimized leaching of the catalyst during the activation process. Therefore, the supported catalyst of this invention allows the olefin polymerization process to proceed without any fouling in the reactor with a slurry or a gas phase process, and the morphology and bulk density of the polymer produced are much better defined than those produced by conventional methods.

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